IPUSB2HDMI

Instruction Manual

HDMI Video Adapter

Ethernet or USB to HDMI Video Adapter

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Manual Revision:10/14/2010
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FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Introduction

The StarTech.com IPUSB2HDMI Video Adapter offers versatile performance by providing either a USB-to-HDMI connection or an IP/Ethernet-to-HDMI connection between a PC and HDMI-capable display device. The ideal solution for PCs lacking a digital video output or PCs that require an additional display at long distances/remote locations.

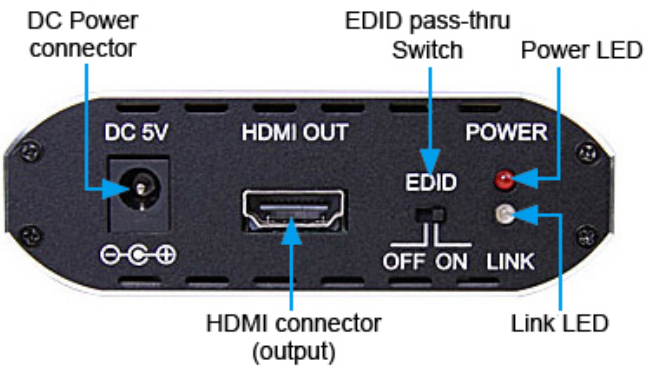
Packaging Contents

- 1 x IPUSB2HDMI video adapter
- 1 x Universal Power Adapter
- 1 x Driver Installation CD
- 1 x Instruction Manual

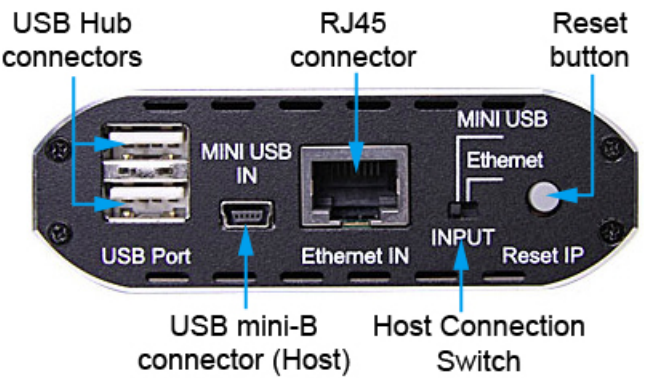
System Requirements

- HDMI enabled display device
- Minimum CPU: Intel/AMD 2.4 GHz single core
- Minimum RAM: 1GB
- Microsoft® Windows® 2000/XP/Vista/7 (32/64-bit)*
  *64-bit only supported over direct USB connection
- Apple® Mac OS® 10.4.11 or later (USB operation only)

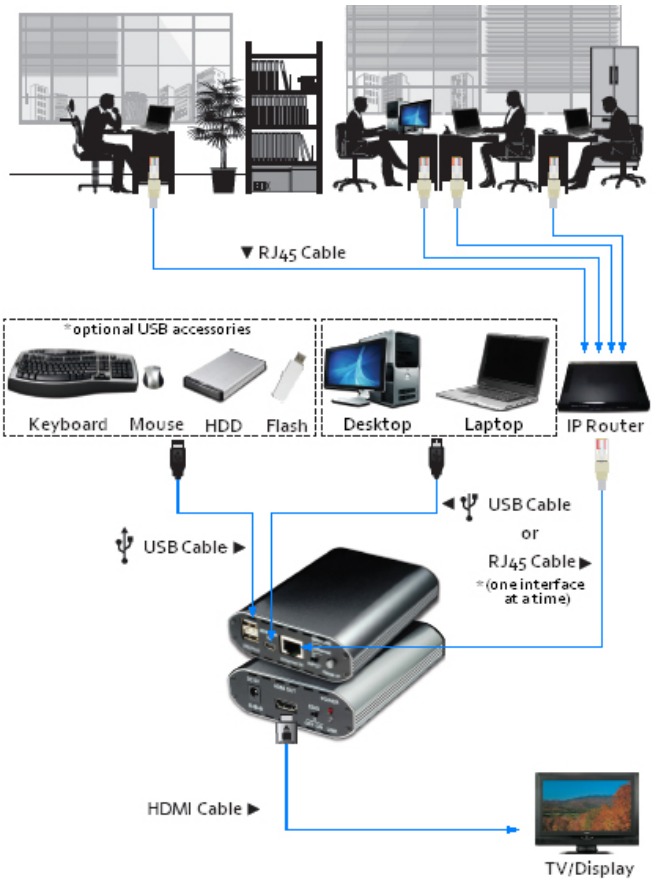
Side 1 View



Side 2 View



Installation Diagram



Installation

Please note: The following installation steps must be completed prior to connecting USB adapter to the host computer, to ensure proper functionality.

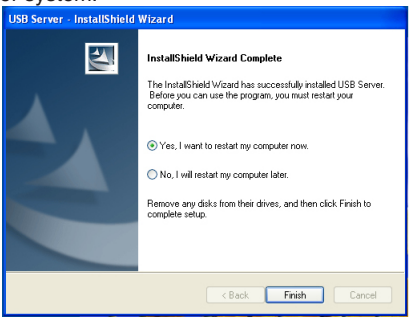
Software Installation for Windows 2000/XP/Vista/7

1. Insert the Driver CD (included) into the CD/DVD-ROM drive.
2. Browse through the Driver CD and locate the “Setup.exe” file under the “USB to HDMI Software” folder. Double-click on the “Setup.exe” file to begin the installation process:

3. When the End User License Agreement appears, please read and accept it, then click Next.

Installs StarTech.com USB2DVI software
StarTech.com
Making hard-to-find easy!
English
SOFTWARE END USER LICENCE AGREEMENT FOR
DISPLAYLINK MIRROR DRIVER and DISPLAYLINK GRAPHICS ADAPTER SOFTWARE
(THE "PROGRAM")
This is a legal agreement between you, the end user, ("You") and DisplayLink (UK) Limited ("DisplayLink"). BY INSTALLING THIS SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS AGREEMENT.
1. Licence
DisplayLink grants You a personal, non-exclusive, non-transferable licence to use one copy of the Program as acquired with this licence in accordance with any user documentation supplied with the Program and in accordance with the terms of this agreement. You may make one back-up copy of the Program, provided that such copy shall be subject to the terms of this agreement.
I Accept
Cancel

4. Please wait while the installation package copies the necessary files.
5. Once completed, in the main (root) directory of the CD, run the XP_VS_Setup.exe file top being the driver installation.
6. When the end of the installation is reached, click “Finish” to restart the computer system.

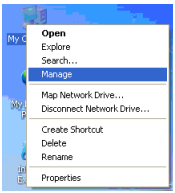

USB Server - InstallShield Wizard
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed USB Server. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish
Cancel

7. After Windows has fully loaded, the Video Adapter will be ready to use.

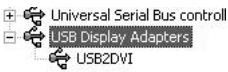
Hardware Installation for USB

1. Set the EDID slide switch to the ON position.
2. Plug the power adapter into the HDMI Video Adapter. The Power LED will light up steady.
3. Slide the “Input” selection switch to USB.
4. Plug in the USB Video Adapter to the computer. Windows should start to automatically load the drivers. Once complete, you should see this icon in your System Tray:

5. To verify the installation, right-click on “My Computer” and select Manage to open the Computer Management window.



6. In the left pane of the Computer Management window, click on Device Manager.
7. In the right pane of the Computer Management window, click on Universal Serial Bus Controllers, and ensure that the USB Video Adapter is listed underneath. Under the Sound category, will be a CMedia USB Audio device.



8. Additional (up to 4) HDMI Video Adapters can now be connected to the computer system. Each device will add additional entries to the Device Manager. Note that only one audio device can be used by Windows at a time. So audio will only be output to one of the HDMI Video Adapters.

OPTIONAL: Connect any USB peripherals to be shared along with the HDMI Video Adapter, into the available USB hub ports on the unit. They will appear as directly connected to the computer system.

Hardware Installation for Ethernet

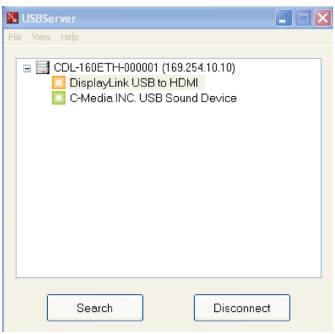
1. Set the EDID slide switch to the ON position.
2. Connect the power adapter to the HDMI Video Adapter. The Power LED will light up steady.
3. Slide the “Input” selection switch to Ethernet.
4. Connect the RJ45 connector on the HDMI Video Adapter to an available Ethernet port on the network equipment, or directly to the computer system.

5. If a DHCP server is available, the HDMI Video Adapter will automatically obtain an IP address and network settings to be able to communicate with other devices on the network.

   If a DHCP server is not available, such as connecting directly to a computer system, the computer system must be set to use an IP address of 169.254.10.1 to be able to communicate with the HDMI Video Adapter.

6. Launch the USB Server software from the desktop Icon.

7. The USB Server software will list the HDMI Video Adapter, with it's currently assigned IP address. Under it will be listed all components of the HDMI Video Adapter that can be accessed by the computer system (i.e. video and audio components).



8. Double-click on the component that needs to be connected, or highlight the component and click the "Connect" button. The Icon will change colour from green to orange.

9. The connected component will then be detected by the computer system and be accessible as if directly connected.

10. To disconnect the component, double-click on it again, or highlight it and click the "Disconnect" button.

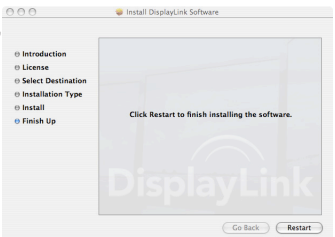
OPTIONAL: Connect any USB peripherals to be shared along with the HDMI Video Adapter, into the available USB hub ports on the unit. They will appear as additional connectable components in the USB Server software.

Installation for Mac OS X

1. Insert the Driver CD (included) into the CD/DVD-ROM drive.
2. Browse through the Driver CD and locate the “DisplayLink-OSX” .dmg file. Double-click on this file to begin the installation process:

3. Double Click the “DisplayLink Software Installer.pkg” to install the software.

4. Once the installation is complete, click the “Restart” button. The computer will automatically reboot, so make sure to close/ save any files you have opened, before pressing this button.

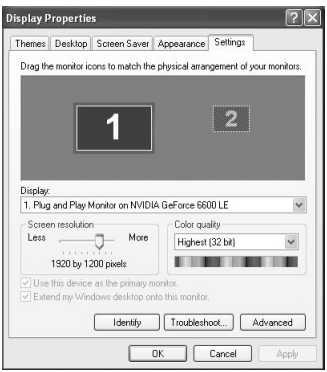


5. After the computer has restarted, plug in the HDMI Video Adapter to an available USB 2.0 port. The adapter should now be ready to use.
6. If you wish to add additional HDMI Video Adapters, simply plug them into available USB 2.0 ports. A maximum total of 4 HDMI Video Adapters can be used on a computer. Note that only one audio device can be used by Mac OS at a time. So audio will only be output to one of the HDMI Video Adapters.

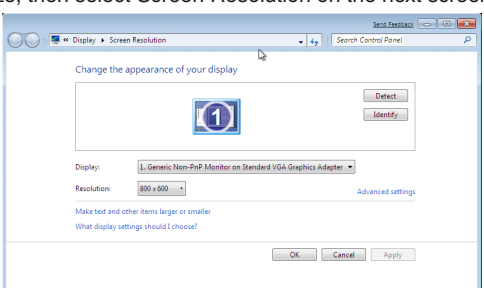
Configuration

Windows 2000/XP/Vista/7

To configure the image being displayed by the monitor that is connected to the HDMI Video Adapter, right-click on a blank section of the desktop, select **Properties**, then click on the **Settings** tab to display the following screen:



For Vista, right-click on a blank section of the desktop and select Personalize, then select Screen Resolution on the next screen.



Configure the secondary display by selecting it from the drop-down menu, then adjusting the desired settings:

Using the Second Display in Extended Mode

In Extended Mode, the monitor that is connected to the HDMI Video Adapter creates an extension of the Windows Desktop displayed on the primary monitor. To set the display to function in this mode (once selected from the drop-down menu), check the box marked Extend my windows desktop onto this monitor, then arrange its position (virtually) with respect to the primary monitor by dragging the monitor icons (shown above as Primary/Secondary orientation) to reflect the physical orientation of the displays.

Using the Second Display in Clone Mode (default)

In Clone Mode, the monitor that is connected to the HDMI Video Adapter simply mirrors the image displayed on the primary monitor. To set the display to function in this mode (once selected from the drop-down menu), uncheck the box marked Extend my windows desktop onto this monitor.

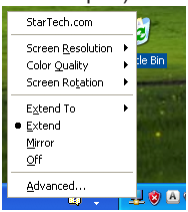
Designating the Primary Display

To select which of the connected monitors will act as the primary display, select the monitor that will be used as the Primary Display from the Drop-down menu (referenced on page 4), and place a checkmark next to Use this device as the primary monitor. On some displays it is necessary to disable the main display (i.e. uncheck the box marked Extend my Windows display onto this monitor for the main display).

Following this change, the monitor connected to the HDMI Video Adapter will remain set as the primary display even if the computer enters hibernate mode or operation is suspended or powered down. If the monitor is disconnected from the HDMI Video Adapter, or the HDMI Video Adapter is removed from the host computer, the original monitor will revert to being the primary display.

Alternate Configuration

Following the software installation for the HDMI Video Adapter, you may have noticed an icon in the taskbar as illustrated below. Clicking on this icon will open a menu that offers configuration of the display (connected to the HDMI Video Adapter):



Here, you can set the secondary display to act as an extension of the primary desktop, or as a mirror image that duplicates the contents on the primary display.

Similarly, the screen resolution, color quality, position of the screen and rotation of the screen can be adjusted from this menu.

To disable the secondary display, select Off.

Media Playback

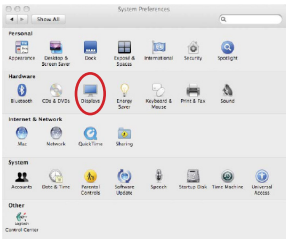
Please note that while operating in Extended Mode, the HDMI Video Adapter can display media files and DVDs using a broad variety of media players, however in Clone Mode, limited support is available for video playback.

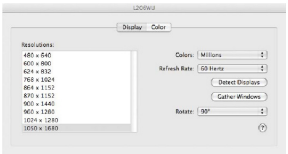
Audio Playback

The audio component of the HDMI Video Adapter adds a new USB sound device to the system. This will be selected by default, but on some system it may need to be selected manually through the Sound and Audio Devices in the Control Panel. Audio will only be passed through the converter to the HDMI display. Any speakers connected directly to the computer system will not be active, while audio is being sent to the HDMI Video Adapter. If multiple HDMI Video Adapters are connected to the computer system, only one audio device can be used. So audio can only be output to one of the HDMI Video Adapters.

Mac OS X

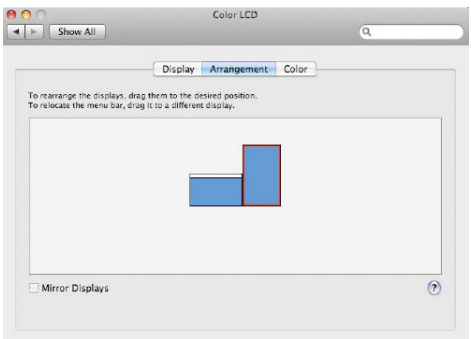
To configure the display settings and monitor positions, bring up the **Displays** Preferences from the **System Preferences** menu:





The Display settings for each display will appear on the individual monitors themselves. To configure them all from a single location, press the “Gather Windows” button and each screen’s Displays Preferences windows will appear on that display.

All supported video resolutions will appear in the list on the left side. To change the positioning of each display, click on the “Arrangement“ button (found only on the primary display) and you can then virtually reposition each display.



Using the Adapter in Extended or Mirror Mode

By default the USB Video Adapter will be setup as an extended display. To change the display as a mirrored/cloned display, check the “Mirror Display” box on the “Arrangement” page for that monitors Displays settings window. To return the monitor to an extended display, uncheck this option.

To use both extended and mirrored displays simultaneously, turn off mirroring then in the “Arrangement” page press and hold the ‘cmd’ and ‘alt’ keys and drag and drop the display you wish to mirror over the primary display (shown with the white bar).

Repeat this with each display you wish to mirror, all others will act as an extended display.

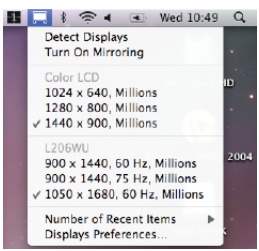
Changing the Primary Display

You can change which display is the primary display by moving the Menu Bar between displays. Changing the primary display affects where new windows appear and the position of the Dock.

To move the Menu Bar, click the white menu bar and drag it to the display you wish to become the primary.

Configuring Displays from the Menu Bar

If you have checked the “Show displays in menu bar” in the Display Preferences window, then you can configure displays by clicking the display icon in the menu bar. This will show a menu similar to the following:



Media Playback

Please note that while operating in Extended Mode, the USB Display Adapter can display media files and DVDs using a broad variety of media players, however in Clone Mode, limited support is available for video playback.

Audio Playback

The audio component of the HDMI Video Adapter adds a new USB sound device to the system. This will be selected by default, but on some system it may need to be selected manually through the Sound Preferences in System Preferences. Audio will only be passed through the converter to the HDMI display. Any speakers connected directly to the computer system will not be active, while audio is being sent to the HDMI Video Adapter. If multiple HDMI Video Adapters are connected to the computer system, only one audio device can be used. So audio can only be output to one of the HDMI Video Adapters.

Specifications

Bus Interface	USB2.0 TCP/IP
Connectors	1 x HDMI female 1 x USB mini-B female 1 x RJ45 Ethernet female 2 x USB type A female 1 x DC power
LEDs	1 x Power 1 x Link
Maximum Video Resolution	1680x1050
Supported Number of Adapters (per system)	USB: 4 Ethernet: 1
Maximum Data Transfer Rate	USB 2.0: 480Mbps Ethernet: 100Mbps
Power Adapter	5VDC, 2.6A, center positive
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)
Humidity	20 ~ 90% RH (no condensation)
Dimensions	90.0mm x 120.0mm x 30.0mm
Weight	220g
Compatible Operating Systems	Windows 2000/XP/Vista/7 (32/64-bit)* Mac OS 10.4.11 or later (USB operation only)

*64-bit only supported over direct USB connection

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